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```
chain nodes :
12  13  15  16  17  18  19  20
ring nodes :
1  2  3  4  5  6  7  8  9
chain bonds :
1-17  2-12  3-16  8-18  12-13  12-15  18-19  19-20
ring bonds :
1-2  1-6  2-3  3-4  4-5  4-7  5-6  5-9  7-8  8-9
exact/norm bonds :
1-2  1-6  1-17  2-3  2-12  3-4  3-16  4-5  4-7  5-6  5-9  7-8  8-9  8-18  12-13
12-15  18-19  19-20
isolated ring systems :
containing 1 :
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G1:C,N

G2:0,S

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 12:CLASS 13:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:Atom 20:CLASS

=> d 11 L1 HAS NO ANSWERS

L1 STR

$$G_2$$
 H
 N
 C_2
 C_3
 C_4
 O

G1 C,N G2 O,S

Structure attributes must be viewed using STN Express query preparation.

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FULL SEARCH INITIATED 14:55:27 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 18247 TO ITERATE

100.0% PROCESSED 18247 ITERATIONS

158 ANSWERS

SEARCH TIME: 00.00.01

L2 158 SEA SSS FUL L1

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COST IN U.S. DOLLARS
SINCE FILE TOTAL
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FULL ESTIMATED COST
178.36
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=> d ibib abs hitstr tot

L3 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1123456 CAPLUS

DOCUMENT NUMBER: 145:454932

TITLE: Preparation of nitrogen-containing heterocyclic

compounds as antitumor agents

INVENTOR(S): Murakata, Chikara; Amishiro, Nobuyoshi; Atsumi,

Toshiyuki; Yamashita, Yoshinori; Takahashi, Takeshi; Nakai, Ryuichiro; Tagaya, Hisashi; Takahashi, Hiroko; Funahashi, Jun; Yamamoto, Junichiro; Fukuda, Yuichi

PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Japan

SOURCE: PCT Int. Appl., 531pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PA:	CENT I	NO.			KIND DATE					APPI		DATE					
	WO	WO 2006112479						2006	1026		WO 2	2006-	 JP30		2	0060	419	
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KM,	KN,	KP,	KR,
			KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
			MZ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
			SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,
			VN,	YU,	ZA,	ZM,	ZW											
		RW:	ΑT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
			IS,	ΙT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ΒJ,
			CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG,	BW,	GH,
			GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,
			KG,	KΖ,	MD,	RU,	ТJ,	TM										
	AU 2006237920							2006	1026		AU 2	2006-		20060419				
	CA 2610446													20060419				
	EP 1880993				A1 20080123					EP 2	2006-		20060419					
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			IS,	ΙΤ,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR	
	KR 2008011199							2008	0131		KR 2	2007-	7267	27		2	0071	116
PRIOR	PRIORITY APPLN. INFO.:										JP 2	2005-	1209	53		A 2	0050	419
											WO 2	2006-	JP30	8224		W 2	0060	419
OTHER	OTHER SOURCE(S):							145:	4549	32								

Ι

GΙ

AB Nitrogen-containing heterocyclic compds. such as 7-(indol-2-yl) isoindolinone and 4-(indol-2-yl)-1, 2-dihydro-1H-pyrrolo[3,4-c] pyridin-3-one derivs. [I; W = N, CH; X = CO, (un) substituted CH; R1 = Q; q1 = N, (un) substituted CH; Q2 = O, S, (un) substituted NH; R2, R3 R5, R6 = H, halo, NO2, HO, cyano, CO2H, each (un) substituted lower alkyl, cycloalkyl, aralkyl, lower

alkenyl, lower alkynyl, aryl, heterocyclyl, lower alkanoyl, lower alkoxycarbonyl, aroyl, heteroaroyl, or HO, S(O)mR18; m = an integer of 0-2; R18 = H, HO, each (un)substituted lower alkoxy, lower alkyl, cycloalkyl, aralkyl, lower alkenyl, aryl, heterocyclyl, or NH2] or pharmacol. acceptable salts thereof are prepared These compds. are useful as protein kinase inhibitors, in particular fibroblast growth factor receptor (FGFR) inhibitors, Aurora kinase inhibitors, and FMS-like tyrosine kinase-3 (FLT-3) inhibitors, and thereby as antitumor agents for treatment of hematopoietic tumors, in particular leukemia, multiple myeloma, and lymphoma. Thus, reductive alkylation of 1-(2hydroxyethyl)piperazine with 4-chloro-7-[1-(tert-butoxycarbonyl)-5formylindol-2-yl]isoindolinone using sodium triacetoxyborohydride in a mixture of AcOH and MeCN followed by treatment with HCl/EtOAc gave 4-chloro-7-(1H-5-[4-(2-hydroxyethyl)piperazin-1-ylmethyl]indol-2yl)isoindolinone dihydrochloride (II). II at 10 μM inhibited ≥50% human FGFR3 expressed in insect cells, human multiple myeloma KMS-11 cells, and human stomach cancer cells KATO-III. 913385-43-0P, 4-Chloro-7-[[1H-5-[[[(pyridin-2-

yl)methyl]amino]carbonyl]benzimidazol-2-yl]carbonyl]isoindolinone RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

RN 913385-43-0 CAPLUS

ΙT

CN 1H-Benzimidazole-6-carboxamide, 2-[(7-chloro-2,3-dihydro-3-oxo-1H-isoindol-4-yl)carbonyl]-N-(2-pyridinylmethyl)- (CA INDEX NAME)

REFERENCE COUNT:

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:665189 CAPLUS

DOCUMENT NUMBER: 145:327641

TITLE: Novel benzimidazole derivatives as selective CB2

inverse agonists

AUTHOR(S): Page, D.; Brochu, M.-C.; Yang, H.; Brown, W.; St-Onge,

S.; Martin, E.; Salois, D.

CORPORATE SOURCE: Department of Chemistry, AstraZeneca R and D Montreal,

Ville St-Laurent, QC, H4S 1Z9, Can.

SOURCE: Letters in Drug Design & Discovery (2006), 3(5),

298-303

CODEN: LDDDAW; ISSN: 1570-1808 Bentham Science Publishers Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

AB The preparation and evaluation of a novel class of CB2 benzimidazole inverse agonists are reported. They showed binding affinities up to 0.7 nM towards CB2 with overall good selectivity over the CB1 receptor. They also reversed the effect of the cannabinoid agonist WIN55212-2 in

competition assays showing Ki' values up to 1.2 nM.

IT 474015-61-7

PUBLISHER:

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(novel benzimidazole derivs. as selective CB2 inverse agonists)

RN 474015-61-7 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-1-(3-methylbutyl)- (CA INDEX NAME)

$$\begin{array}{c|c} \text{O} & \text{OEt} \\ \text{Et}_2\text{N}-\text{C} & \text{N} & \text{CH}_2 \\ \hline & \text{N} & \text{CH}_2-\text{CH}_2-\text{CHMe}_2 \end{array}$$

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1117980 CAPLUS

DOCUMENT NUMBER: 144:16432

TITLE: Virtual Screening of Novel CB2 Ligands Using a

Comparative Model of the Human Cannabinoid CB2

Receptor

AUTHOR(S): Salo, Outi M. H.; Raitio, Katri H.; Savinainen, Juha

R.; Nevalainen, Tapio; Lahtela-Kakkonen, Maija; Laitinen, Jarmo T.; Jaervinen, Tomi; Poso, Antti

CORPORATE SOURCE: Department of Pharmaceutical Chemistry, University of

Kuopio, Kuopio, FIN-70211, Finland

SOURCE: Journal of Medicinal Chemistry (2005), 48(23),

7166-7171

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AB To identify novel selective CB2 lead compds., a comparative model of the CB2 receptor was constructed using the high-resolution bovine rhodopsin X-ray structure as a template. The CB2 model was utilized both in building the database queries and in filtering the hit compds. by a docking and scoring method. In G-protein activation assays, 1-isoquinoly1[3-

(trifluoromethyl)phenyl]methanone (40, NRB 04079) was found to act as a selective agonist at the human CB2 receptor.

IT 474016-55-2

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(virtual screening of novel CB2 ligands using CB2 receptor model)

RN 474016-55-2 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-1-[[(2R)-1-methyl-2-piperidinyl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 112 THERE ARE 112 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L3 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:369276 CAPLUS

DOCUMENT NUMBER: 142:411658

TITLE: Preparation of 2-(aminoalkyl)-5-

benzimidazolecarboxamide derivatives as peptide

deformylase inhibitors

INVENTOR(S): Hjelmencrantz, Anders; Cali, Patrizia; Groth, Thomas;

Jensen, Christian Eeg; Naerum, Lars

PATENT ASSIGNEE(S): Arpida A/S, Den.

SOURCE: PCT Int. Appl., 73 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GΙ

PA	TENT	NO.			KIND DATE					APPL	ICAT	DATE							
				A1 20050428				WO 2	004-		20041008								
WO	0 2005037272 W: AE, AG, AL,									50					~ ~	~			
	W:																		
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,		
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KΡ,	KR,	KΖ,	LC,		
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NΙ,		
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,		
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		ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,		
		EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PL,	PT,	RO,	SE,		
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,		
		SN,	TD,	ΤG															
EP	EP 1677785						2006	0712	EP 2004-762898						20041008				
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		ΙE,	SI,	FI,	RO,	CY,	TR,	BG,	CZ,	EE,	HU,	PL,	SK						
JP							2007	0412	JP 2006-535947						20041008				
US	US 20070066672						A1 20070322 US 2006-572415								2	20060317			
PRIORIT	PRIORITY APPLN. INFO.:									DK 2	003-	1553			A 2	0031	022		
										US 2						0031			
										WO 2						0041			
OTHER S	OURCE	CASREACT 142:411658; MARPAT 142:411658																	

Ι

The invention relates to benzimidazole compds. I [X is CONHOH, CO2H, OH or AΒ SH; R1 is alkyl, cycloalkyl, mercapto-, alkylthio-, hydroxy- or carboxyalkyl, etc., (un)substituted aryl or heteroaryl, or a side chain of a natural lpha-amino acid, with the proviso that R1 cannot be H or tert-butyl; R2 is alkyl, alkenyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, alkoxy, mercaptoalkyl, hydroxyalkyl, alkylthio, etc., (un) substituted aryl or heteroaryl; R3 is NHCHR4COR5, NR6R7, NHR7 or OR7, where R4 is H or a side chain of a natural α -amino acid, R5 is amino, hydroxy, alkoxy or alkylamino, and R6, R7 are independently heterocycloalkyl, aryl or heteroaryl] and their pharmaceuticallyacceptable salts or esters which are peptide deformylase inhibitors useful in the treatment or prevention of infections and other diseases in which peptide deformylases are involved, especially in the treatment of bacterial and parasitic infections. Thus, peptidyl compound II was prepared by the solid-phase method and showed IC50 values 65.0 and 45.4 microM for inhibition of the enzyme from E. coli and S. aureus, resp.

IT 850487-92-2P 850487-94-4P 850488-02-7P 850488-04-9P 850488-66-3P 850488-68-5P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of (aminoalkyl)benzimidazolecarboxamide derivs. as peptide deformylase inhibitors)

RN 850487-92-2 CAPLUS

CN Glycine, N-[[1-cyclopropyl-2-[2-(4-hydroxyphenyl)-1-[(3-mercapto-1-oxopropyl)amino]ethyl]-1H-benzimidazol-5-yl]carbonyl]-, methyl ester (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & \\ & & & & \\ O & & & \\ O & & & \\ MeO-C-CH_2-NH-C & & \\ & & & \\ MeO-C-CH_2-NH-C & & \\ & & & \\ & & & \\ N & & \\ \end{array}$$

RN 850487-94-4 CAPLUS

CN Glycine, N-[[1-(cyclohexylmethyl)-2-[2-(4-hydroxyphenyl)-1-[(3-mercapto-1-oxopropyl)amino]ethyl]-1H-benzimidazol-5-yl]carbonyl]-, methyl ester (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\$$

RN 850488-02-7 CAPLUS

CN Butanoic acid, 4-[[1-[1-cyclopropyl-5-[[(2-methoxy-2-

oxoethy1)amino]carbony1]-1H-benzimidazol-2-y1]-2-(4hydroxypheny1)ethy1]amino]-4-oxo- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & & \\ & & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

RN 850488-04-9 CAPLUS

CN Butanoic acid, 4-[[1-[1-(cyclohexylmethyl)-5-[[(2-methoxy-2-oxoethyl)amino]carbonyl]-1H-benzimidazol-2-yl]-2-(4-hydroxyphenyl)ethyl]amino]-4-oxo- (CA INDEX NAME)

RN 850488-66-3 CAPLUS

CN Glycine, N-[[1-cyclopropyl-2-[1-[[4-(hydroxyamino)-1,4-dioxobutyl]amino]-2-(4-hydroxyphenyl)ethyl]-1H-benzimidazol-5-yl]carbonyl]-, methyl ester (CA INDEX NAME)

RN 850488-68-5 CAPLUS

CN Glycine, N-[[1-(cyclohexylmethyl)-2-[1-[[4-(hydroxyamino)-1,4-dioxobutyl]amino]-2-(4-hydroxyphenyl)ethyl]-1H-benzimidazol-5-yl]carbonyl]-, methyl ester (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:354919 CAPLUS

DOCUMENT NUMBER: 140:375170

TITLE: Preparation of benzimidazolecarboxamides as CB2

receptor agonists for treating pain and other

disorders

INVENTOR(S): Page, Daniel; Walpole, Christopher; Yang, Hua

PATENT ASSIGNEE(S): Astrazeneca AB, Swed. SOURCE: PCT Int. Appl., 87 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GΙ

PAT	CENT 1	NO.			KIND DAT				APPLICATION NO.						DATE				
WO	2004	48		A1	_	2004	0429		WO	2003-	20031015								
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EP	1554254							EP 2003-751705											
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ZA	A		2006				2005-					0050							
MX			2005				2005-					0050							
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ORIT	APP:	LN.	INFO	. :							2002- 2003-					0021 0031			

OTHER SOURCE(S): MARPAT 140:375170

AB Benzimidazolecarboxamides (shown as I; variables defined below; e.g. II) as well as salts and pharmaceutical compns. including the compds. were prepared These compds. are useful in therapy, in particular in the management of pain. For I: RF1 and RF2 = electron-withdrawing groups; Z = O and S; R1 = (un) substituted C1-10-alkyl, (un) substituted C2-10alkenyl, (un) substituted C2-10alkynyl, R3R4N-C1-6alkyl, R3R4NC(0)-C1-6alkyl, R30-C1-6-alkyl, R30C(0)-C1-6alkyl, R3C(0)-C1-6alkyl, R3C(0)NR3-C1-6alkyl, R3R4NSO2-C1-6alkyl, R3CSO2N(R4)-C1-6alkyl, R3R4NC(O)N(R5)-C1-6alkyl, R3R4NSO2N(R5)-C1-6alkyl, aryl-C1-6alkyl, aryl-C(0)-C1-6alkyl, heterocyclyl-C1-6alkyl, heterocyclyl-C(0)-C1-6alkyl, substituted aryl-C1-6alkyl, substituted aryl-C(0)-C1-6alkyl, substituted heterocyclyl-C1-6alkyl, substituted heterocyclyl-C(0)-C1-6alkyl, and C1-10hydrocarbylamino. R2 = (un)substituted C1-6alkyl, (un)substituted C2-6alkenyl, (un)substituted C2-6alkynyl, (un)substituted C3-6cycloalkyl, (un) substituted aryl, and (un) substituted C5-6heteroaryl; R3, R4 and R5 = H, C1-6alkyl, C2-6alkenyl, C2-6alkynyl, and a divalent C1-6group that together with another divalent C1-6group forms a portion of a ring; X is a C1-10 divalent group that separates groups connected thereto by one or two atoms; Ar is a C4-12 divalent aromatic group; and Y = CH and N; addnl. details are given in the claims. Methods of preparation are claimed and example prepns. for .apprx.30 I and 39 intermediates are included. For example, II was prepared in 71% yield from 4-ethoxyphenylacetyl chloride and 3-amino-4-[(3-methylbutyl)amino]-N, N-bis(2,2,2-trifluoroethyl)benzamide, which was prepared in 99% yield by reduction of 4-[(3-methylbutyl)amino]-3-nitro-

N,N-bis(2,2,2-trifluoroethyl)benzamide, which was prepared in 99% yield from isoamylamine and 4-fluoro-3-nitro-N,N-bis(2,2,2-trifluoroethyl)benzamide, which was prepared in 66% yield from 4-fluoro-3-nitrobenzoic acid and bis(2,2,2-trifluoroethyl)amine. Dissociation consts. (Ki) for binding to CB1 and CB2 are tabulated for 36 examples of I; they show much stronger binding to CB2 than to CB1.

IT 683233-67-2P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(drug candidate; preparation of benzimidazolecarboxamides as CB2 receptor agonists for treating pain and other disorders)

RN 683233-67-2 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[(2R)-2-piperidinylmethyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (10:21) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-66-1 CMF C27 H30 F6 N4 O2

Absolute stereochemistry.

CRN 76-05-1 CMF C2 H F3 O2

683233-41-2 CAPLUS

RN CN

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ΙT
    683233-41-2P 683233-42-3P 683233-43-4P
    683233-44-5P 683233-45-6P 683233-46-7P
    683233-47-8P 683233-48-9P 683233-49-0P
    683233-50-3P 683233-51-4P 683233-52-5P
    683233-53-6P 683233-54-7P 683233-55-8P
    683233-56-9P 683233-58-1P 683233-59-2P
    683233-60-5P 683233-61-6P 683233-62-7P
    683233-63-8P 683233-64-9P 683233-65-0P
    683233-66-1P 683233-68-3P 683233-69-4P
    683233-71-8P 683233-72-9P 683233-73-0P
    683233-74-1P 683233-75-2P 683233-76-3P
    683233-77-4P 683233-78-5P 683233-79-6P
    683233-80-9P 683233-81-0P 683233-82-1P
    683233-84-3P 683233-85-4P 683233-86-5P
    683233-87-6P 683233-88-7P 683233-89-8P
    683233-90-1P 683233-91-2P 683233-92-3P
    683233-93-4P 683233-94-5P 683233-95-6P
    683233-96-7P 683233-97-8P 683233-98-9P
    683233-99-0P 683234-00-6P 683234-01-7P
    683234-03-9P 683234-04-0P 683234-05-1P
    683234-06-2P 683234-07-3P 683234-08-4P
    683234-10-8P 683234-12-0P 683234-13-1P
    683234-14-2P 683234-15-3P 683234-16-4P
    683234-17-5P
    RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (drug candidate; preparation of benzimidazolecarboxamides as CB2 receptor
        agonists for treating pain and other disorders)
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1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-(3-methylbutyl)-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683233-42-3 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-(3-methylbutyl)-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (10:3) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-41-2 CMF C26 H29 F6 N3 O2

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-43-4 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclopropylmethyl)-2-[(4-ethoxyphenyl)methyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683233-44-5 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclopropylmethyl)-2-[(4-ethoxyphenyl)methyl]-N,N-bis(2,2,2-trifluoroethyl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CRN 683233-43-4

CMF C25 H25 F6 N3 O2

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-45-6 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclohexylmethyl)-2-[(4-ethoxyphenyl)methyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683233-46-7 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclohexylmethyl)-2-[(4-ethoxyphenyl)methyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (10:9) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-45-6

CMF C28 H31 F6 N3 O2

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-47-8 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-(2-furanylmethyl)-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683233-48-9 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-(2-furanylmethyl)-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (5:2) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-47-8 CMF C26 H23 F6 N3 O3

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-49-0 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[(2S)-2-pyrrolidinylmethyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 683233-50-3 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[(2S)-2-pyrrolidinylmethyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (5:11) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-49-0 CMF C26 H28 F6 N4 O2

Absolute stereochemistry.

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-51-4 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[(2R)-2-pyrrolidinylmethyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 683233-52-5 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[(2R)-2-pyrrolidinylmethyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (5:11) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-51-4 CMF C26 H28 F6 N4 O2 Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-53-6 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-(4-pyridinylmethyl)-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

$$F_3C-CH_2-N-C \\ F_3C-CH_2 \\ N-CH_2 \\$$

RN 683233-54-7 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-(4-pyridinylmethyl)-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (2:5) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-53-6 CMF C27 H24 F6 N4 O2

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-55-8 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[1-(4-ethoxyphenyl)ethyl]-1-(4-pyridinylmethyl)-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683233-56-9 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[1-(4-ethoxyphenyl)ethyl]-1-(4-pyridinylmethyl)-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-55-8 CMF C28 H26 F6 N4 O2

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-58-1 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[(tetrahydro-2H-pyran-4-yl)methyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683233-59-2 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[(tetrahydro-2H-pyran-4-yl)methyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (5:6) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-58-1 CMF C27 H29 F6 N3 O3

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-60-5 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[[(2R)-tetrahydro-2-furanyl]methyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 683233-61-6 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[[(2R)-tetrahydro-2-furanyl]methyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (5:7) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-60-5 CMF C26 H27 F6 N3 O3

Absolute stereochemistry.

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-62-7 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[[(2S)-tetrahydro-2-furanyl]methyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 683233-63-8 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[[(2S)-tetrahydro-2-furanyl]methyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (5:7) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-62-7 CMF C26 H27 F6 N3 O3 Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

$${\tiny \begin{array}{c}F\\F-C-CO_2H\\|\\F\end{array}}$$

RN 683233-64-9 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[(tetrahydro-2H-pyran-2-yl)methyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683233-65-0 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[(tetrahydro-2H-pyran-2-yl)methyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-64-9 CMF C27 H29 F6 N3 O3

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-66-1 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[(2R)-2-piperidinylmethyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 683233-68-3 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(5-ethoxy-2-pyridinyl)methyl]-1[(tetrahydro-2H-pyran-4-yl)methyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683233-69-4 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(5-ethoxy-2-pyridinyl)methyl]-1[(tetrahydro-2H-pyran-4-yl)methyl]-N,N-bis(2,2,2-trifluoroethyl)-,
trifluoroacetate (5:8) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-68-3 CMF C26 H28 F6 N4 O3

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-71-8 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(5-ethoxy-2-pyridinyl)methyl]-1-(3-methylbutyl)-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683233-72-9 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(5-ethoxy-2-pyridinyl)methyl]-1-(3-methylbutyl)-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (5:4) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-71-8 CMF C25 H28 F6 N4 O2

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-73-0 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[[(2R)-1-methyl-2-pyrrolidinyl]methyl]-N, N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 683233-74-1 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[[(2R)-1-methyl-2-pyrrolidinyl]methyl]-N, N-bis(2,2,2-trifluoroethyl)-, tris(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-73-0 CMF C27 H30 F6 N4 O2

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-75-2 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[[(2R)-1-methyl-2-piperidinyl]methyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 683233-76-3 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[[(2R)-1-methyl-2-piperidinyl]methyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-75-2 CMF C28 H32 F6 N4 O2

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-77-4 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(5-ethoxy-2-pyridinyl)methyl]-1-[(2R)-2-pyrrolidinylmethyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 683233-78-5 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(5-ethoxy-2-pyridinyl)methyl]-1-[(2R)-2-pyrrolidinylmethyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (5:11) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-77-4 CMF C25 H27 F6 N5 O2

Absolute stereochemistry.

CM 2

CRN 76-05-1

RN 683233-79-6 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[1-(4-ethoxyphenyl)ethyl]-1-[(2R)-2-pyrrolidinylmethyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 683233-80-9 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[1-(4-ethoxyphenyl)ethyl]-1-[(2R)-2-pyrrolidinylmethyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 683233-79-6

CMF C27 H30 F6 N4 O2

Absolute stereochemistry.

CM 2

CRN 76-05-1

RN 683233-81-0 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(5-ethoxy-2-pyridinyl)methyl]-1-[[(2R)-1-methyl-2-piperidinyl]methyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 683233-82-1 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(5-ethoxy-2-pyridinyl)methyl]-1-[[(2R)-1-methyl-2-piperidinyl]methyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 683233-81-0

CMF C27 H31 F6 N5 O2

Absolute stereochemistry.

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-84-3 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(5-ethoxy-2-pyridinyl)methyl]-1-[[(2R)-1-methyl-2-pyrrolidinyl]methyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 683233-85-4 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(5-ethoxy-2-pyridinyl)methyl]-1-[[(2R)-1-methyl-2-pyrrolidinyl]methyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 683233-84-3 CMF C26 H29 F6 N5 O2

Absolute stereochemistry.

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-86-5 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclobutylmethyl)-2-[(4-ethoxyphenyl)methyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683233-87-6 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclobutylmethyl)-2-[(4-ethoxyphenyl)methyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (5:3) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-86-5 CMF C26 H27 F6 N3 O2

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-88-7 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclobutylmethyl)-2-[(5-ethoxy-2-pyridinyl)methyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683233-89-8 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclobutylmethyl)-2-[(5-ethoxy-2-pyridinyl)methyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-88-7 CMF C25 H26 F6 N4 O2

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-90-1 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclopentylmethyl)-2-[(5-ethoxy-2-pyridinyl)methyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683233-91-2 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclopentylmethyl)-2-[(5-ethoxy-2-pyridinyl)methyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (10:11) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-90-1 CMF C26 H28 F6 N4 O2

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-92-3 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[(2S)-2-piperidinylmethyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 683233-93-4 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[(2S)-2-piperidinylmethyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 683233-92-3 CMF C27 H30 F6 N4 O2

Absolute stereochemistry.

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-94-5 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(5-ethoxy-2-pyridinyl)methyl]-1-(3-furanylmethyl)-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683233-95-6 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(5-ethoxy-2-pyridinyl)methyl]-1-(3-furanylmethyl)-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (5:6) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-94-5 CMF C25 H22 F6 N4 O3

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-96-7 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(5-ethoxy-2-pyridinyl)methyl]-1-(3-thienylmethyl)-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683233-97-8 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(5-ethoxy-2-pyridinyl)methyl]-1-(3-thienylmethyl)-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (10:7) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-96-7

CMF C25 H22 F6 N4 O2 S

CRN 76-05-1 CMF C2 H F3 O2

RN 683233-98-9 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclohexylmethyl)-2-[(5-ethoxy-2-pyridinyl)methyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683233-99-0 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclohexylmethyl)-2-[(5-ethoxy-2-pyridinyl)methyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (10:21) (9CI) (CA INDEX NAME)

CM 1

CRN 683233-98-9 CMF C27 H30 F6 N4 O2

CRN 76-05-1 CMF C2 H F3 O2

$$\begin{array}{c} F \\ | \\ F - C - CO_2H \\ | \\ F \end{array}$$

RN 683234-00-6 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclohexylmethyl)-2-[[5-(1-methylethoxy)-2-pyridinyl]methyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683234-01-7 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclohexylmethyl)-2-[[5-(1-methylethoxy)-2-pyridinyl]methyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (5:3) (9CI) (CA INDEX NAME)

CM 1

CRN 683234-00-6 CMF C28 H32 F6 N4 O2

CRN 76-05-1 CMF C2 H F3 O2

RN 683234-03-9 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[(4-methyl-3-morpholinyl)methyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683234-04-0 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[(4-methyl-3-morpholinyl)methyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (5:9) (9CI) (CA INDEX NAME)

CM 1

CRN 683234-03-9 CMF C27 H30 F6 N4 O3

CRN 76-05-1 CMF C2 H F3 O2

RN 683234-05-1 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(5-ethoxy-2-pyridinyl)methyl]-1-[(4-methyl-3-morpholinyl)methyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683234-06-2 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(5-ethoxy-2-pyridinyl)methyl]-1-[(4-methyl-3-morpholinyl)methyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 683234-05-1 CMF C26 H29 F6 N5 O3

CRN 76-05-1 CMF C2 H F3 O2

RN 683234-07-3 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[[(2S)-1-methyl-2-piperidinyl]methyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 683234-08-4 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[[(2S)-1-methyl-2-piperidinyl]methyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (5:9) (9CI) (CA INDEX NAME)

CM 1

CRN 683234-07-3 CMF C28 H32 F6 N4 O2 Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 683234-10-8 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[[4-(1-methylethoxy)phenyl]methyl]-1-[[(2R)-1-methyl-2-piperidinyl]methyl]-N,N-bis(2,2,2-trifluoroethyl)-, trifluoroacetate (10:23) (9CI) (CA INDEX NAME)

CM 1

CRN 683234-09-5 CMF C29 H34 F6 N4 O2

Absolute stereochemistry.

CRN 76-05-1 CMF C2 H F3 O2

RN 683234-12-0 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-[(1-methyl-2-piperidinyl)methyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683234-13-1 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[[4-(1-methylethoxy)phenyl]methyl]-1-[(1-methyl-2-piperidinyl)methyl]-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683234-14-2 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-(2-pyrrolidinylmethyl)-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683234-15-3 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-1-(2-piperidinylmethyl)-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683234-16-4 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[1-(4-ethoxyphenyl)ethyl]-1-(2-pyrrolidinylmethyl)-N,N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 683234-17-5 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(5-ethoxy-2-pyridinyl)methyl]-1-[[(2S)-1-methyl-2-pyrrolidinyl]methyl]-N, N-bis(2,2,2-trifluoroethyl)- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:511305 CAPLUS

DOCUMENT NUMBER: 139:85348

TITLE: Preparation of benzimidazoles and indoles as glucagon

receptor antagonists/inverse agonists.

INVENTOR(S): Lau, Jesper; Christensen, Inge Thoger; Madsen, Peter;

Behrens, Carsten

PATENT ASSIGNEE(S): Novo Nordisk A/s, Den. SOURCE: PCT Int. Appl., 91 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 9

PATENT INFORMATION:

	PATENT NO.				KINI)	DATE APPLICATION N				7O.	DATE						
	WO 2003053938			A1 20030703			1	WO 2	 002-1	 DK83:	20021210							
		W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
			PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,
			UA,	UG,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW							
		RW:	GH,	GM,	ΚE,	LS,	MW,	MΖ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
			KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
			FI,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	SI,	SK,	TR,	BF,	ВJ,
			CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
	AU 2002347022				A1 20030709			AU 2002-347022					20021210					
PRIO	PRIORITY APPLN. INFO.:				.:				DK 2001-1925					A 20011220				
										1	WO 2	002-1	DK83:	2	I	w 2	0021	210
										_								

OTHER SOURCE(S): MARPAT 139:85348

GΙ

AB Title compds. [I; A = HO2C(CHR1)m(CH2)n, tetrazolylalkyl; m = 0, 1; n = 0-3; $m+n \neq 0$; R1 = H, F, (CH2)oOR2; o = 0, 1; R2 = H, alkyl,

II

alkanoyl, aryl, aralkyl; X = N, CH; B = (substituted) Ph, naphthyl, azolyl, fluorenyl, norbornenyl; D = (CH2)p, CHPh(CH2)p, (CH2)pO; p = 0-4; E = (substituted) Ph, pyridinyl, azolyl, cycloalkenyl, etc.; with the exception of a specific compound], were prepared Thus, title compound (II) and 26 addnl. I were prepared by solid phase synthesis using Fmoc-protected amino acids on Wang resin. Many I showed IC50 < 1000 nM in a glucagon receptor binding assay.

IT 552839-46-0P 552839-53-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzimidazoles and indoles as glucagon receptor antagonists/inverse agonists)

RN 552839-46-0 CAPLUS

CN β -Alanine, N-[[2-[2-(2-methoxyphenyl)ethyl]-1-(4-phenylbutyl)-1H-benzimidazol-5-yl]carbonyl]- (CA INDEX NAME)

$$MeO$$
 MeO
 N
 CH_2-CH_2
 N
 CH_2-CH_2
 N
 CH_2-CH_2

RN 552839-53-9 CAPLUS

CN β -Alanine, N-[[1-[[3,5-bis(trifluoromethyl)phenyl]methyl]-2-[(2-methoxyphenyl)methyl]-1H-benzimidazol-5-yl]carbonyl]- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:832768 CAPLUS

DOCUMENT NUMBER: 137:337892

TITLE: Novel alkoxyarylbenzimidazoles as CB2 receptor

agonists

INVENTOR(S): Cheng, Yun-Xing; Tomaszewski, Miroslaw; Walpole,

Christopher; Yang, Hua Astrazeneca AB, Swed. PCT Int. Appl., 112 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT ASSIGNEE(S):

SOURCE:

P	PATENT NO.)	DATE		APPLICATION NO.						DATE			
					A1 20021031				WO 2002-SE769						20020418			
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BE	3, B	ЗG,	BR,	BY,	BZ,	CA	, СН,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	ΕC	C, E	Œ,	ES,	FΙ,	GB,	GD	, GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE	Ξ, Κ	ζĠ,	KP,	KR,	KZ,	LC	, LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	M	1, M	ΊW,	MX,	MZ,	NO,	NZ	, OM,	PH,
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SF	K, S	SL,	TJ,	TM,	TN,	TR	, TT,	TZ,
		UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ΖV	V							
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ	Ζ, Τ	ſΖ,	UG,	ZM,	ZW,	ΑT	, BE,	CH,
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE	Ξ, Ι	ΙΤ,	LU,	MC,	NL,	PΤ	, SE,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GÇ	Q, G	∃W,	ML,	MR,	NE,	SN	, TD,	TG
С	A 2444	1381			A1		2002	1031		CA	200)2-2	2444	381			20020	418
А	U 2002	3075	86		A1		2002	1105		AU	200)2-3	3075	86			20020	418
E	E 2003	0052	4		Α		2004	0216		EE	200	3-5	524				20020	418
E	P 1390	350			A1		2004	0225		EΡ	200)2-	7641.	20			20020	418
	R:												LI,	LU,	NL,	SE	, MC,	PT,
							RO,	MK,	CY,	ΑI	, T	ſR						
Н	U 2003	0038	25		A2												20020	
Н	U 2003	0038	25		А3		2005	0628										
В	R 2002	0089	07		А		2004	0420		BR	200)2-8	3907				20020	418
С	N 1503	787			А		2004	0609		CN	200)2-8	3085	77			20020	418
J	P 2004	5283	34		T		2004	0916		JΡ	200)2-5	5833	93			20020	418
N	Z 5284	103			A		2005	0527		NZ	200)2-5	5284	03			20020	418
N	Z 5386	92			Α		2006	0929		ΝZ	200)2-5	5386	92			20020	418
R	U 2312	864			C2		2007	1220		RU	200	3-1	1296.	38			20020	418
Z	A 2003	30077	52		A		2005	0103		ZA	200)3-	7752				20031	003
U	U 2003 R 2002 N 1503 P 2004 Z 5284 Z 5386 U 2312 A 2003 S 7030 G 1082 O 2003	10116	465		A1		2004	0617		US	200)3-4	1745	49			20031	009
U	S 7030	1139			B2		2006	0418										
В	G 1082	271			A		2004	1230		BG	200)3-1	1082	71			20031	014
N	0 2003	0046	65		Α -		2003	1210		NO	200)3-4	1665	- 0			20031	017
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	US 20060135554				AI		2006	0622		US	200)6-3	3251.	24		_	20060	104
PRIORI	PRIORITY APPLN. INFO.:																20010	
										NΖ	200	12-5	284	03		Αl	20020	418
																	20020	
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OTHER	SOURCE	. (8):			MARI	- A T	13/:	3 1 / X'	1/									

OTHER SOURCE(S): MARPAT 137:337892

GI

AB Title compds. I [R1 = (un)substituted alkyl, alkenyl; R2 = alkyl, fluoroalkyl, cycloalkyl; R3 = (un)substituted H2NCONH, HCONH, HO2CNH, H2NCSNH, HSO2NH, H2NSO2, H2NCH2, H2NCS, H2NCO, NH2, acyl; X = (un)substituted CH2, NH, CO, CH2CH2, CH:CH, O, S, S(O), SO2; Y = CH, N; Ar = (un)substituted aryl] were prepared as CB2 receptor agonists in the management of pain. Thus, 4,3-F(O2N)C6H3CONH2 was treated with H2NCH2CH2CO2Et followed by reduction of the nitro group and cyclization with 4-EtOC6H4CH2COCl to give the benzimidazole II, formed by transesterification during chromatog. II had Ki for human CB2 receptor binding of 142 nM.

IT 474015-09-3P 474015-20-8P 474015-39-9P
 474015-48-0P 474016-36-9P 474016-41-6P
 474016-46-1P 474016-51-8P 474016-56-3P
 474016-61-0P 474016-67-6P 474017-17-9P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

(preparation of novel alkoxyarylbenzimidazoles as CB2 receptor agonists) $\rm RN - 474015-09-3 - CAPLUS$

CN 1H-Benzimidazole-1-propanoic acid, 5-[(diethylamino)carbonyl]-2-[(4-ethoxyphenyl)methyl]-, methyl ester, trifluoroacetate (5:9) (9CI) (CA INDEX NAME)

CM 1

CRN 474015-08-2 CMF C25 H31 N3 O4

$$\begin{array}{c|c} & & & & \\ & & & \\ \text{Et}_2\text{N}-\text{C} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 474015-20-8 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-[2-(acetylmethylamino)ethyl]-2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 474015-19-5 CMF C26 H34 N4 O3

$$\begin{array}{c|c} \text{O} & \text{OEt} \\ \text{Et}_2\text{N}-\text{C} & \text{N} & \text{CH}_2 \\ & \text{N} & \text{CH}_2-\text{CH}_2-\text{N}-\text{Ac} \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 474015-39-9 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-[2-(dimethylamino)-1-methylethyl]-2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-, trifluoroacetate (2:5) (9CI) (CA INDEX NAME)

CM 1

CRN 474015-38-8 CMF C26 H36 N4 O2

$$\begin{array}{c|c} O & O \\ Et_2N-C & N \\ \hline & N \\ CH-CH_2-NMe_2 \\ \hline & Me \\ \end{array}$$

CRN 76-05-1 CMF C2 H F3 O2

RN 474015-48-0 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclopropylmethyl)-2-[(6-ethoxy-3-pyridinyl)methyl]-N,N-diethyl- (CA INDEX NAME)

$$\begin{array}{c|c} \text{O} & \text{OEt} \\ \text{Et}_2 \text{N} - \text{C} & \text{N} \\ \hline & \text{N} - \text{CH}_2 \\ \hline & \text{N} - \text{CH}_2 \\ \end{array}$$

RN 474016-36-9 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-1-(3-thienylmethyl)-, trifluoroacetate (10:17) (9CI) (CA INDEX NAME)

CM 1

CRN 474016-35-8 CMF C26 H29 N3 O2 S

$$\begin{array}{c|c} O & \\ \hline \\ Et_2N-C & \\ \hline \\ N-CH_2 & \\ \hline \\ S & \\ \end{array}$$

CRN 76-05-1 CMF C2 H F3 O2

RN 474016-41-6 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-1[(2R)-2-pyrrolidinylmethyl]-, trifluoroacetate (5:11) (9CI) (CA INDEX NAME)

CM 1

CRN 474016-40-5 CMF C26 H34 N4 O2

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 474016-46-1 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-1[[(2S)-tetrahydro-2-furanyl]methyl]-, trifluoroacetate (2:5) (9CI) (CA
INDEX NAME)

CM 1

CRN 474016-45-0 CMF C26 H33 N3 O3

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 474016-51-8 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-1[[(2R)-1-methyl-2-pyrrolidinyl]methyl]-, trifluoroacetate (5:12) (9CI)
(CA INDEX NAME)

CM 1

CRN 474016-50-7 CMF C27 H36 N4 O2

Absolute stereochemistry.

CRN 76-05-1 CMF C2 H F3 O2

RN 474016-56-3 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-1[[(2R)-1-methyl-2-piperidinyl]methyl]-, trifluoroacetate (10:21) (9CI)
(CA INDEX NAME)

CM 1

CRN 474016-55-2 CMF C28 H38 N4 O2

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 474016-61-0 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-1[[(2S)-1-methyl-2-piperidinyl]methyl]-, trifluoroacetate (10:21) (9CI)
(CA INDEX NAME)

CRN 474016-60-9 CMF C28 H38 N4 O2

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 474016-67-6 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)hydroxymethyl]-N,N-diethyl-1-(3-methylbutyl)-, trifluoroacetate (5:6) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 474016-66-5 CMF C26 H35 N3 O3

$$\begin{array}{c|c} \text{O} & \text{OH} & \text{OEt} \\ \text{Et}_2\text{N} - \text{C} & \text{N} & \text{CH} \\ & \text{CH}_2 - \text{CH}_2 - \text{CHMe}_2 \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 474017-17-9 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-1-[(5-nitro-2-thienyl)methyl]- (CA INDEX NAME)

IT 474015-15-1P 474015-62-8P 474015-69-5P

RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of novel alkoxyarylbenzimidazoles as CB2 receptor agonists)

RN 474015-15-1 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(2-aminoethyl)-2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-, trifluoroacetate (5:14) (9CI) (CA INDEX NAME)

CM 1

CRN 474015-14-0 CMF C23 H30 N4 O2

$$\begin{array}{c|c} \text{O} & \text{OEt} \\ \text{Et}_2\text{N}-\text{C} & \text{N} & \text{CH}_2 \\ \hline & \text{N} & \text{CH}_2-\text{CH}_2-\text{NH}_2 \\ \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

$$\begin{array}{c|c} F \\ \mid \\ F-C-CO_2H \\ \mid \\ F \end{array}$$

RN 474015-62-8 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-1-(3-methylbutyl)-, trifluoroacetate (10:17) (9CI) (CA INDEX NAME)

CM 1

CRN 474015-61-7 CMF C26 H35 N3 O2

$$\begin{array}{c|c} \text{O} & \text{OEt} \\ \text{Et}_2\text{N}-\text{C} & \text{N} & \text{CH}_2 \\ \hline & \text{N} & \text{CH}_2-\text{CH}_2-\text{CHMe}_2 \\ \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 474015-69-5 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-(4-ethoxybenzoyl)-N,N-diethyl-1-(3-methylbutyl)- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & \\ & & & & \\ \text{Et}_2\text{N} - \text{C} & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\$$

IT 474014-92-1P 474014-98-7P 474015-03-7P 474015-25-3P 474015-29-7P 474015-37-7P 474015-44-6P 474015-52-6P 474015-56-0P 474015-66-2P 474015-71-9P 474015-73-1P 474016-14-3P 474017-37-3P 474017-41-9P 474017-45-3P 474017-49-7P 474017-52-2P 474017-58-8P 474017-65-7P 474017-86-2P 474017-92-0P 474017-99-7P 474018-02-5P

CM 1

CRN 474014-91-0 CMF C26 H34 N4 O3

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 474014-98-7 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-1-(2-methoxyethyl)-, trifluoroacetate (5:11) (9CI) (CA INDEX NAME)

CM 1

CRN 474014-97-6 CMF C24 H31 N3 O3

$$\begin{array}{c|c} \text{O} & \text{OEt} \\ \text{Et}_2\text{N}-\text{C} & \text{N} & \text{CH}_2 \\ \hline & \text{N} & \text{CH}_2-\text{CH}_2-\text{OMe} \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 474015-03-7 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-[2-(acetylamino)ethyl]-2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-, trifluoroacetate (10:21) (9CI) (CA INDEX NAME)

CM 1

CRN 474015-02-6 CMF C25 H32 N4 O3

$$\begin{array}{c|c} \text{O} & \text{OEt} \\ \text{Et}_2\text{N}-\text{C} & \text{N} \\ \text{CH}_2-\text{CH}_2-\text{NHAc} \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 474015-25-3 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-1-methyl-, trifluoroacetate (10:21) (9CI) (CA INDEX NAME)

CM 1

CRN 474015-24-2 CMF C22 H27 N3 O2

CRN 76-05-1 CMF C2 H F3 O2

RN 474015-29-7 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-1-(2-phenylethyl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 474015-28-6 CMF C29 H33 N3 O2

$$\begin{array}{c|c} \bullet & \bullet & \bullet \\ Et_2N-C & N & CH_2 \\ \hline & N & CH_2-CH_2-Ph \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 474015-37-7 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-1-[2-(1-piperidinyl)ethyl]-, trifluoroacetate (5:13) (9CI) (CA INDEX NAME)

CM 1

CRN 474015-36-6 CMF C28 H38 N4 O2

$$\begin{array}{c|c} \bullet & \bullet & \bullet \\ Et_2N-C & N & CH_2 & N \\ \hline & N-CH_2-CH_2-N & \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

$$\begin{array}{c} F \\ | \\ F - C - CO_2H \\ | \\ F \end{array}$$

RN 474015-44-6 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclopropylmethyl)-2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-, trifluoroacetate (10:19) (9CI) (CA INDEX NAME)

CM 1

CRN 474015-43-5 CMF C25 H31 N3 O2

$$\begin{array}{c|c} \text{O} & \text{OEt} \\ \text{Et}_2 \text{N} - \text{C} \\ & \text{N} - \text{CH}_2 \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 474015-52-6 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-[2-(dimethylamino)ethyl]-2-[2-(4-dimethylamino)ethyl]

ethoxyphenyl)ethyl]-N,N-diethyl- (CA INDEX NAME)

$$\begin{array}{c|c} \mathsf{C} & \mathsf{O} & \mathsf{OEt} \\ \mathsf{Et}_2\mathsf{N} - \mathsf{C} & \mathsf{N} & \mathsf{CH}_2 - \mathsf{CH}_2 \\ & \mathsf{N} & \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{NMe}_2 \end{array}$$

RN 474015-56-0 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclopropylmethyl)-2-[2-(4-ethoxyphenyl)ethyl]-N,N-diethyl- (CA INDEX NAME)

$$\begin{array}{c|c} \text{O} & \text{OEt} \\ \text{Et}_2 \text{N} - \text{C} & \text{CH}_2 - \text{CH}_2 \\ \hline & \text{N} - \text{CH}_2 \end{array}$$

RN 474015-66-2 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-1-(4-pyridinylmethyl)-, trifluoroacetate (10:21) (9CI) (CA INDEX NAME)

CM 1

CRN 474015-65-1 CMF C27 H30 N4 O2

$$\begin{array}{c|c} O & O & O \\ Et_2N-C & N & CH_2 \\ \hline & N-CH_2 \\ \hline & N-CH_2 \\ \hline & N-CH_2 \\ \hline \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 474015-71-9 CAPLUS

CN 1H-Benzimidazole-5-carbothioamide, 2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-1-(3-methylbutyl)- (CA INDEX NAME)

$$\begin{array}{c|c} S & OEt \\ Et_2N-C & N & CH_2 \\ \hline & N & CH_2-CH_2-CHMe_2 \end{array}$$

RN 474015-73-1 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, N-cyclohexyl-1-(cyclopropylmethyl)-2-[(4-ethoxyphenyl)methyl]-N-methyl-, hydrochloride (5:11) (CA INDEX NAME)

●11/5 HCl

RN 474016-14-3 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine-6-carboxamide, 3-(cyclopropylmethyl)-2-[(4-ethoxyphenyl)methyl]-N,N-diethyl- (CA INDEX NAME)

$$\begin{array}{c|c} \text{O} & \text{OEt} \\ \text{Et}_2 \text{N} - \text{C} & \text{CH}_2 \\ \hline & \text{N} - \text{CH}_2 \\ \end{array}$$

RN 474017-37-3 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-[2-(dimethylamino)ethyl]-2-[(4-ethoxyphenyl)methyl]-N,N-diethyl- (CA INDEX NAME)

$$CH_2$$
 CH_2 CH_2

RN 474017-41-9 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-1-(2-propenyl)-(9CI) (CA INDEX NAME)

$$\operatorname{CH}_2$$
 CH_2 CH_2 CH_2 CH_2

RN 474017-45-3 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-cyclopropyl-2-[(4-ethoxyphenyl)methyl]-N,N-diethyl- (CA INDEX NAME)

$$\begin{array}{c|c} O & \\ \hline \\ Et_2N-C & \\ \hline \\ N & \\ \end{array}$$

RN 474017-49-7 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclopropylmethyl)-2-[(4-ethoxyphenyl)methyl]-N,N-bis(1-methylethyl)- (CA INDEX NAME)

$$(i-Pr)_2N-C \\ N \\ CH_2 \\ N-CH_2$$

RN 474017-52-2 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-1-(2-pyridinylmethyl)- (CA INDEX NAME)

RN 474017-58-8 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, N-cyclobutyl-1-(cyclopropylmethyl)-2-[(4-ethoxyphenyl)methyl]-N-methyl- (CA INDEX NAME)

RN 474017-65-7 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine-6-carboxamide, 2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-3-(3-methylbutyl)- (CA INDEX NAME)

RN 474017-86-2 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclopropylmethyl)-2-[(5-ethoxy-2-pyridinyl)methyl]-N-ethyl- (CA INDEX NAME)

RN 474017-92-0 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclopropylmethyl)-2-[(4-ethoxyphenyl)methyl]-N-ethyl- (CA INDEX NAME)

RN 474017-99-7 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-[(2-chloro-4-thiazoly1)methy1]-2-[(4-ethoxypheny1)methy1]-N,N-diethyl- (CA INDEX NAME)

RN 474018-02-5 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-1-(4-thiazolylmethyl)- (CA INDEX NAME)

RN 474018-06-9 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-1-(2-quinolinylmethyl)- (CA INDEX NAME)

$$\begin{array}{c|c} & \text{EtO} \\ \hline \\ \text{Et}_2\text{N} - \text{C} \\ \hline \\ \text{N} - \text{CH}_2 \\ \hline \\ \text{N} - \text{CH}_2 \\ \hline \end{array}$$

RN 474018-09-2 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-1-[3-(1H-imidazol-1-yl)propyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ \text{Et}_2\text{N} - \text{C} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\$$

RN 474018-13-8 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-[2-(dimethylamino)ethyl]-N,N-diethyl-2-[[4-(trifluoromethoxy)phenyl]methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} \text{C} & \text{C} & \text{C} \\ \text{Et}_2\text{N}-\text{C} & \text{N} \\ \text{C}\text{H}_2-\text{C}\text{H}_2-\text{NMe}_2 \end{array}$$

RN 474018-15-0 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, N,N-diethyl-1-[2-(4-morpholinyl)ethyl]-2- [[4-(trifluoromethoxy)phenyl]methyl]- (CA INDEX NAME)

RN 474018-19-4 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, N,N-diethyl-2-[[4-(1-methylethoxy)phenyl]methyl]-1-[2-(4-morpholinyl)ethyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & & & \\ & & & & & & \\ \text{Et}_2\text{N} - \text{C} & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\ &$$

RN 474018-22-9 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, N,N-diethyl-1-[2-(1-piperidinyl)ethyl]-2-[[4-(trifluoromethoxy)phenyl]methyl]- (CA INDEX NAME)

RN 474018-24-1 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[(1E)-2-(4-ethoxyphenyl)ethenyl]-N,N-diethyl-1-[(1-ethyl-2-pyrrolidinyl)methyl]- (CA INDEX NAME)

Double bond geometry as shown.

RN 474018-27-4 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, N,N-diethyl-1-[(1-ethyl-2-pyrrolidinyl)methyl]-2-[[4-(trifluoromethoxy)phenyl]methyl]- (CA INDEX NAME)

RN 474018-31-0 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclopropylmethyl)-2-[(4-ethoxyphenyl)methyl]-N-ethyl-N-(phenylmethyl)- (CA INDEX NAME)

$$\begin{array}{c|c} O & \\ \hline \text{Et-N-C} \\ \text{Ph-CH}_2 & \\ \hline N & \text{CH}_2 \\ \hline \end{array}$$

RN 474018-34-3 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclopropylmethyl)-2-[(4-ethoxyphenyl)methyl]-N-[[(2R)-tetrahydro-2-furanyl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 474018-66-1 CAPLUS

CN 1H-Benzimidazole-5-carbothioamide, 1-(cyclopropylmethyl)-2-[(4-ethoxyphenyl)methyl]-N-[2-(3-pyridinyl)ethyl]- (CA INDEX NAME)

RN 474018-69-4 CAPLUS

CN 1H-Benzimidazole-5-carbothioamide, 1-(cyclopropylmethyl)-N-[2-(dimethylamino)ethyl]-2-[(4-ethoxyphenyl)methyl]-N-ethyl- (CA INDEX NAME)

$$\begin{array}{c|c} \text{Et } S \\ & \parallel \\ & \parallel \\ \\ \text{Me}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{N}-\text{C} \\ & \text{N}-\text{CH}_2 \\ \end{array}$$

RN 474019-56-2 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-[2-(dimethylamino)ethyl]-2-[2-(4-ethoxyphenyl)ethyl]-N,N-diethyl-, hydrochloride (5:14) (CA INDEX NAME)

$$\begin{array}{c|c} \mathsf{C} & \mathsf{C} \\ \mathsf{Et}_2\mathsf{N}-\mathsf{C} \\ \mathsf{N} & \mathsf{CH}_2-\mathsf{CH}_2 \\ & \mathsf{CH}_2-\mathsf{CH}_2-\mathsf{NMe}_2 \end{array}$$

●14/5 HCl

RN 474019-59-5 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 1-(cyclopropylmethyl)-2-[2-(4-ethoxyphenyl)ethyl]-N,N-diethyl-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{O} & \text{OEt} \\ \text{Et}_2\text{N}-\text{C} & \text{N} & \text{CH}_2-\text{CH}_2 \\ \hline & \text{N}-\text{CH}_2 \\ \end{array}$$

● HCl

RN 474020-70-7 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine-6-carboxamide, 3-(cyclopropylmethyl)-2-[(4-ethoxyphenyl)methyl]-N,N-diethyl-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & O \\ \hline Et_2N-C & & N & CH_2 \\ \hline & N & CH_2 \\ \hline & & N \end{array}$$

● HCl

REFERENCE COUNT:

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:87826 CAPLUS

DOCUMENT NUMBER: 124:218061

TITLE: Manufacture of printed circuit board

INVENTOR(S): Oono, Takao; Akaike, Shinichi PATENT ASSIGNEE(S): Tamura Kaken Co Ltd, Japan SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07307552	A	19951121	JP 1994-119657	19940510
PRIORITY APPLN. INFO.:			JP 1994-119657	19940510
OTHER COMPOSITION	MADDAT	124.219061		

OTHER SOURCE(S): MARPAT 124:218061

GΙ

$$(X^1)_n$$
 N Y^1 N N Y^1

$$(X^2)_n$$
 $(CH_2)_m$

AB To form a circuit wiring pattern having through holes a Cu-coated substrate is etched after forming an etching resist film on through holes and in their periphery using a solution containing ≥1 benzimidazole compound I (X1 = halo, NH2, lower dialkylamino, OH, lower alkoxy, CN, Ac, benzoyl, NH2CO, CHO, COOH, lower alkoxycarbonyl, NO2; Y1 = C1-20 (branched) alkyl; n = 1-4), II (X2, Y2 (sic) = halo, NH2, lower dialkylamino, OH, lower alkoxy, CN, Ac, benzoyl, NH2CO, CHO, COOH, lower alkoxycarbonyl, NO2; Y2 = C1-7 (branched) alkyl; n, p = 0-4; m = 1-10), and/or its salt. The resist

IT 152937-37-6

RL: TEM (Technical or engineered material use); USES (Uses) (etching resist films containing benzimidazole derivative for patterning of printed circuit boards)

ΙI

RN 152937-37-6 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[2-(2,4-dihydroxyphenyl)ethyl]- (9CI) (CA INDEX NAME)

film may be heated or oxidized before etching.

$$H_2N-C$$
 $H_2N-CH_2-CH_2$
OH
OH

L3 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:137286 CAPLUS

DOCUMENT NUMBER: 120:137286

TITLE: Heat-resistant protective agents for printed circuit

boards

INVENTOR(S): Sasahara, Yasumichi; Shibata, Seiji

PATENT ASSIGNEE(S): Tamura Kaken Co Ltd, Japan SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05186888	A	19930727	JP 1992-157615	19920617
JP 3112744	В2	20001127		

PRIORITY APPLN. INFO.: JP 1991-232877 A1 19910912

OTHER SOURCE(S): MARPAT 120:137286

GΙ

$$X_n$$
 X_n
 X_n
 X_n
 X_n
 X_n
 X_n
 X_n
 X_n

AB The title agents contain I (X = C1-7 alkyl, halo, NH2, OH, CN, AcO, BzO, CO2H, NO2, low alkoxy, di-(low)alkylamino, carbamoyl, formyl, low alkoxycarbonyl). Soaking an etched Cu plate in an aqueous solution containing tartaric acid and 2-(8-phenyloctyl)benzoimidazole gave a plate with good heat and moisture resistance and solderability.

IT 152937-37-6

RL: USES (Uses)

(aqueous solns. of, as protective agents, for printed circuit boards, for solderability)

RN 152937-37-6 CAPLUS

CN 1H-Benzimidazole-5-carboxamide, 2-[2-(2,4-dihydroxyphenyl)ethyl]- (9CI) (CA INDEX NAME)

$$H_2N-C$$
 H_2N-CH_2
 H_2N-CH_2
 H_2N-CH_2
 H_2N-CH_2
 H_2N-CH_2
 H_2N-CH_2

=> log y COST IN U.S. DOLLARS	SINCE FILE	TOTAL
FULL ESTIMATED COST	ENTRY 50.01	SESSION 228.58
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-7.20	-7.20

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